FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

ATTY. DOCKET NO.	APPLN. NO.
ABX-PHRI CON	10/628,004
APPLICANT Abraham Pinter et al.	CONFIRMATION NO. 3975
FILING DATE	GROUP
July 25, 2003	1645

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MH	5,266,478	11/30/1993	Chang et al.	435	240.27	

FOREIGN PATENT DOCUMENTS

EXAMINER	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
INITIAL	NUMBER	DAIL	COUNTRI	CLASS		YES	NO
MH	WO 95/24904	09/21/1995	PCT				
MH	WO 96/34096	10/31/1996	PCT				
MH	WO 99/12556	3/18/1999	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
МН	Alsmadi, O. et al., "Antibody-Dependent Cellular Cytotoxicity Directed against Cells Expressing Human Immunodeficiency Virus Type 1 Envelope of Primary or Laboratory-Adapted Strains by Human and Chimpanzee Monoclonal Antibodies of Different Epitope Specificities," <i>J. Virol.</i> , 72:286-293 (1998)
·	Arendrup, M. et al., "The HIV-1 V3 Domain on Field Isolates: Participation in Generation of Escape Virus In Vivo and Accessibility to Neutralizing Antibodies," <i>Arch Virol</i> , 140:655-670 (1995)
	Arendrup, M. et al., "Neutralizing Antibody Response During Human Immunodeficiency Virus Type 1 Infection: Type and Group Specificity and Viral Escape," <i>Journal of General Virology</i> , 74:855-863 (1993)
	Barbas, C.F. et al., "Molecular Profile of an Antibody Response to HIV-1 as Probed by Combinatorial Libraries," J. Mol. Biol., 230:812-823 (1993)
	Berger, E.A. et al., "Chemokine Receptors As HIV-1 Coreceptors: Roles in Viral Entry, Tropism, and Disease," <i>Annual Reviews Immunol.</i> , 17:657-700 (1999).
	Berman, P.W. et al., "Genetic and Immunologic Characterization of Viruses Infecting MN-rgp 120- Vaccinated Volunteers," <i>The Journal of Infectious Diseases</i> , 176:384-397 (1997)
	Binley, J.M. et al., "An Investigation of the High-Avidity Antibody Response to Glycoprotein 120 of Human Immunodeficiency Virus Type 1," <i>AIDS Research and Human Retroviruses</i> , 13:1007-1015 (1997)
	Boots, L.J. et al., "Anti-Human Immunodeficiency Virus Type 1 Human Monoclonal Antibodies that Bind Discontinuous Epitopes in the Viral Glycoproteins Can Identify Mimotopes from Recombinant Phage Peptide Display Libraries," AIDS Research and Human Retroviruses," 13:1549-1559 (1997)
	Conley, A.J. et al., "Neutralization of Primary Human Immunodeficiency Virus Type 1 Isolates by the Broadly Reactive Anti-V3 Monoclonol Antibody, 447-52D," J. Virol., 68:6994-7000 (1994)
$\overline{}$	Conley, A.J. et al., "Neutralization of Divergent Human Immunodeficiency Virus Type 1 Variants and Primary Isolates by IAM-41-2F5, an Anti-gp41 Human Monoclonol Antibody," <i>Proc. Natl. Acad. Sci.</i> , 91:3348-3352 (1994)

EXAMINER

/Myron Hill/

DATE CONSIDERED

12/09/2006

	·		Sheet 2 of 5			
FORM PTO-14	49 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ABX-PHRI CON	APPLN. NO. 10/628,004			
WARD 8 2004	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Abraham Pinter et al.	CONFIRMATION NO. 3975			
The same of the sa	5	FILING DATE July 25, 2003	GROUP 1645			
CALENT & TE						
MH	Ditzel, H.J. et al., "Mapping the Protein Surface of Husing Human Monoclonal Antibodies from Phage Di					
	D'Souza, P.M. et al., "Evaluation of Monoclonal Anti Assays: an International Collaboration," AIDS, 5:106	"Evaluation of Monoclonal Antibodies to HIV-1 by Neutralization and Serological onal Collaboration," <i>AIDS</i> , 5:1061-1070 (1991)				
	D'Souza, P.M. et al., "Neutralization of Primary HIV-Antibodies," AIDS, 9:867-874 (1995)	1 Isolates by Anti-Envelop	e Monoclonal			
	D'Souza, P.M. et al., "Evaluation of Monoclonal Anti Primary Isolates by Neutralization Assays: Performa Clinical Trials," <i>The Journal of Infectious Diseases</i> ,	ance Criteria for Selecting				
	Fontenot, J.D. et al., "Presentation of HIV V3 Loop Immunogenicity and Diagnostic Potential," AIDS, 9:		igenicity,			
	Forthal, D.N. et al., "Functional Activities of 20 Human Specific Human Monoclonal Antibodies," AIDS Rese (1995)					
	Fouts, T.R. et al., "Neutralization of the Human Imm by Human Monoclonal Antibodies Correlates with A Envelope Glycoprotein Complex," <i>J. Virol.</i> , 71:2779-	ntibody Binding to the Ölig				
	Fung, M.S. C. et al, "Identification and Characterizat Variable Region of Human Immunodeficiency Virus					
	Gauduin, MC. et al., "Effective Ex Vivo Neutralizati Plasma by Recombinant Immunoglobulin Molecules					
	Gorny, M.K. et al., "Production of Site-Selected Neu the Third Variable Domain of the Human Immunode <i>Proc. Natl. Acad. Sci.</i> , 88:3238-3242 (1991)					
	Gorny, M. K. et al., "Repertoire of Neutralizing Huma Domain of HIV-1 gp120," <i>J. Immunol.</i> , 150:635-643		Specific for the V3			
	Gorny, M.K. et al., "Human Anti-V2 Monoclonal Anti-Isolates of Human Immunodeficiency Virus Type 1,"	body that Neutralizes Prim J. Virol., 68:8312-8320 (1	ary but not Laboratory 994)			
		clonal Antibodies to the V3 Loop of HIV-1 With Intra- and Interclade Cross- 9: 5114-5122 (1997).				
	Gorny, M.K. et al., "A Human Monoclonal Antibody Cross-Reacts with Other HIV Type 1 Clades," AIDS (1998).					
	He, Y. et al., "Efficient Isolation of Novel Human Mo Against HIV-1 from Transgenic Mice Expressing Hu					
	Hill, M.C. et al., "Envelope Glycoproteins from Huma Simian Immunodeficiency Virus Can Use Human Co Direct CD4-Dependent Interactions with This Chemi	CR5 as a Coreceptor for V	iral Entry and Make			
	Karwowska, S. et al., "Type-Specific' Human Monor Various HIV-1 Isolates," Vaccines 92, 171-174 (199		eact with the V3 Loop of			
4 1 4						

EXAMINER

/Myron Hill/

J. Virol., 68:400-410 (1994).

DATE CONSIDERED

12/09/2006

Kayman, S.C. et al., "Presentation of Native Epitopes in the V1/V2 and V3 Regions of Human Immunodeficiency Virus Type 1 gp120 by Fusion Glycoproteins Containing Isolated gp120 Domains,"

FORMAPTO-1	449
MAR 0 8 2004	GHEA
COTATO THE STATE	<u> </u>

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

ATTY. DOCKET NO. ABX-PHRI CON	APPLN. NO. 10/628,004	
APPLICANT Abraham Pinter et al.	CONFIRMATION NO. 3975	
FILING DATE July 25, 2003	GROUP 1645	

MH.	Krachmarov, C.P. et al., "V-3 Specific Polyclonal Antibodies Affinity Purified from Sera of Infected Humans Effectively Neutralize Primary Isolates of Human Immunodeficiency Virus Type 1," AIDS Research and Human Retroviruses, 17:1737-1748 (2001).
	LaCasse, R.A. et al., "Fusion-Competent Vaccines: Broad Neutralization of Primary Isolates of HIV," Science, 283:357-362 (1999)
	Laisney, I.L. et al., "Dual Specificity of a Human Neutralizing Monoclonal Antibody, Specific for the V3 Loop of GP120 (HIV-1)," Immunology Letters, 67:185-192 (1999)
	Little, M. et al., "Of Mice and Men: Hybridoma and Recombinant Antibodies," <i>Immunology Today</i> , 21:364-370 (2000).
	McKeating, J.A. et al., "Chimeric Viruses Expressing Primary Envelope Glycoproteins of Human Immunodeficiency Virus Type 1 Show Increased Sensitivity to Neutralization by Human Sera," Virology, 220:450-460 (1996)
	Mondor, I. et al., "Human Immunodeficiency Virus Type 1 Attachment to HeLa CD4 Cells Is CD4 Independent and gp120 Dependent and Requires Cell Surface Heparans," <i>J. Virol.</i> , 72:3623-3634 (1998)
	Moore, J.P. et al., "Immunochemical Analysis of the gp120 Surface Glycoprotein of Human Immunodeficiency Virus Type 1: Probing the Structure of the C4 and V4 Domains and the Interaction of the C4 Domain with the V3 Loop," <i>J. Virol.</i> , 67:4785-4796 (1993)
	Moore, J.P. et al., "Probing the Structure of the V2 Domain of Human Immunodeficiency Virus Type Surface Glycoprotein gp120 with a Panel of Eight Monoclonal Antibodies: Human Immune Response to the V1 and V2 Domains," J. Virol., 67:6136-6151 (1993)
	Moore, J.P. et al., "Development of the Anti-gp120 Antibody Response During Seroconversion to Human Immunodeficiency Virus Type 1," <i>J. Virol.</i> , 68:5142-5155 (1994)
	Moore, J.P. et al., "Exploration of Antigenic Variation in gp120 From Clades A Through F of Human Immunodeficiency Virus Type 1 by Using Monoclonal Antibodies," J. Virol., 68:8350-8364 (1994)
	Moore, J.P. et al., "HIV-1 Neutralization: the Consequence of Viral Adaptation to Growth on Transformed T Cells," <i>AIDS</i> , 9:S117-S136 (1995)
	Moore, J.P. et al., "A Human Monoclonal Antibody to a Complex Epitope in the V3 Region of gp120 of Human Immunodeficiency Virus Type 1 Has Broad Reactivity Within and Outside Clade B," <i>J. Virol.</i> , 69:122-130 (1995)
	Moore, John P. et al., "Antibody Cross-Competition Analysis of the Human Immunodeficiency Virus Type 1 gp120 Exterior Envelope Glycoprotein," <i>J. Virol.</i> , 70:1863-1872 (1996)
	Murakami, T. et al., "Inhibitory Mechanism of the CXCR4 Antagonist T22 against Human Immunodeficiency Virus Type 1 Infection," <i>J. Virol.</i> , 73:7489-7496 (1999)
	Nyambi, P.N. et al., "Mapping of Epitopes Exposed on Intact Human Immunodeficiency Virus Type 1 (HIV-1) Virions: a New Strategy for Studying the Immunologic Relatedness of HIV-1," <i>J. Virol.</i> , 72:9384-9391 (1998)
	Pal, R. et al., "Characterization of a Neutralizing Monoclonal Antibody to the External Glycoprotein of HIV-1," <i>Intervirology</i> , 86:86-93 (1992)
	Parren, P.W. H. et al., "Antibodies against HIV-1 from Phage Display Libraries: Mapping of an Immur Response and Progress Towards Antiviral Immunotherapy," Chemical Immunology, 65:18-56 (1997)
Ψ	Parren, P.W. H. et al., "Erratum to 'Relevance of the Antibody Response Against Human Immunodeficiency Virus Type 1 Envelope to Vaccine Design'," <i>Immunology Letters</i> , 58:125-132 (1997)

EXAMINER

DATE CONSIDERED

/Myron Hill/

12/09/2006

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ABX-PHRI CON	APPLN. NO. 10/628,004	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Abraham Pinter et al.	CONFIRMATION NO. 3975	
	FILING DATE July 25, 2003	GROUP 1645	
		_	
Parren, P.W. H. et al., "Neutralization of Human Im Is Determined Primarily by Occupancy of Sites on <i>Virol.</i> , 72:3512-3519 (1998)	nmunodeficiency Virus Type the Virion Irrespective of E	e 1 by Antibody to gp120 pitope Specificity," <i>J.</i>	
Overlapping the CD4 Binding Site of HIV-1 gp120	That is Broadly Conserved	Across North American	
Virus Type 1 (HIV-1) gp120 by Human Monoclonal	I Antibodies Produced by E		
Sattentau, Q.J., "Conservation of HIV-1 gp120 Net AIDS, 9:1383-1385 (1995)	utralizing Epitopes After Fo	rmalin Inactivation,"	
Antibody that Preferentially Recognizes Non-Sync	ytium-Inducing Human Imm		
Schutten, M. et al., "Enhancement of Infectivity of a Human Antibodies that Neutralize Syncytium-Indus	a Non-Syncytium Inducing cing HIV-1," Scand. J. Imm	HIV-1 by sCD4 and by unol., 41:18-22 (1995)	
Schutten, M. et al., "Human Antibodies that Neutralize Primary Human Immunodefici in vitro Do Not Provide Protection in an in vivo Model," Journal of General Virology, 7			
	es," <i>Journal of General Virology</i> , 78:999-1006 (1997) That Recognizes the V3 Region of Human		
	solate Highly Susceptible to		
V3 Loop and the CD4-Binding Site of gp120," AIDS			
(1992).			
	Parren, P.W. H. et al., "Neutralization of Human In Is Determined Primarily by Occupancy of Sites on Virol., 72:3512-3519 (1998) Pinter, A. et al., "A Potent, Neutralizing Human Mc Overlapping the CD4 Binding Site of HIV-1 gp120 and African Virus Isolates," AIDS Research and H Pinter, A. et al., "Potent Neutralization of Primary I Epitopes Present in the V1/V2 Domain of HIV-1 gg Robinson, J.E. et al., "Identification of Conserved Virus Type 1 (HIV-1) gp120 by Human Monoclona Lines," AIDS Research and Human Retroviruses, Sattentau, Q.J., "Conservation of HIV-1 gp120 Net AIDS, 9:1383-1385 (1995) Schnierle, B.S. et al., "Psuedotyping of Murine Let Generates a Retroviral Vector with Specificity of In Sci., 94:8640-8645 (1997) Schutten, M. et al., "Characterization of a V3 Dom Antibody that Preferentially Recognizes Non-Sync Type 1 Strains," Journal of General Virology, 76:11 Schutten, M. et al., "Enhancement of Infectivity of Human Antibodies that Neutralize Syncytium-Indu Schutten, M. et al., "Human Antibodies that Neutralize Schutten, M. et al., "Human Antibodies that Neutralize Schutten, M. et al., "Human Monoclonal Antibody The Immunodeficiency Virus gp120 and Neutralizes the Proc. Natl. Acad. Sci., 87:8597-8601 (1990) Seligman, S.J. et al., "Characterization by Serial D Epitopes Recognized by Monoclonal Antibodies," J. Stamatatos, L. et al., "An Envelope Modification TI Clade B Human Immunodeficiency Virus Type 1 Is from Other Clades," J. Virol., 72:7840-7845 (1998) Sullivan, N. et al., "Determinants of Human Immun Activation by Soluble CD4 and Monoclonal Antibod Thall, M. et al., "Characterization of Conserved Hu Neutralization Epitopes Exposed Upon gp120-CD4 Tilley, S.A. et al., "Synergistic Neutralization of HIV-100-100-1000-1000-1000-1000-1000-1000	PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT Parren, P.W. H. et al., "Neutralization of Human Immunodeficiency Virus Type Is Determined Primarily by Occupancy of Sites on the Virion Irrespective of E Virol., 72:3512-3519 (1998) Pinter, A. et al., "A Potent, Neutralizing Human Monoclonal Antibody Against Overlapping the CD4 Binding Site of HIV-1 gp120 That is Broadly Conserved and African Virus Isolates," AIDS Research and Human Retroviruses, 9:985-Pinter, A. et al., "Potent Neutralization of Primary HIV-1 Isolates by Antibodies Epilopes Present in the VII/2 Domain of HIV-1 gp120," Vaccine, 16:1803-18 Robinson, J.E. et al., "Identification of Conserved and Variant Epitopes of Hur Virus Type 1 (HIV-1) gp120 by Human Monoclonal Antibodies Produced by E Lines," AIDS Research and Human Retroviruses, 6:567-579 (1990) Sattentau, Q.J., "Conservation of HIV-1 gp120 Neutralizing Epitopes After Fo AIDS, 9:1383-1385 (1995) Schnierle, B.S. et al., "Psuedotyping of Murine Leukemia Virus with the Envel Generates a Retroviral Vector with Specificity of Infection for CD4-Expressing Sci., 94:8640-8645 (1997) Schutten, M. et al., "Characterization of a V3 Domain-Specific Neutralizing Hi Antibody that Preferentially Recognizes Non-Syncytium-Inducing Human Imm Type 1 Strains," Journal of General Virology, 76:1665-1673 (1995) Schutten, M. et al., "Human Antibodies that Neutralize Primary Human Immunodeficiency Virus Type 1 Strains," Human Antibodies that Neutralize Syncytium-Inducing HIV-1," Scand. J. Imm Schutten, M. et al., "Human Antibodies that Neutralize Primary Human Immunodeficiency Virus gp120 and Neutralizes the Human T-Lymphotropic V Proc. Natl. Acad. Sci., 87:8597-8601 (1990) Scilgman, S.J. et al., "An Envelope Modification That Recognizes the V3 Regimmunodeficiency Virus gp120 and Neutralizes the Human Immunodeficiency Virus Type 1 Eactivation by Soluble CD4 and Monoclonal Antibodies," J. Virol., 72:6332-633 Thall, M. et al., "Characterization of Conserved Human Immunodeficiency Vir	

EXAMINER

/Myron Hill/

DATE CONSIDERED

12/09/2006

			Sheet 5 of 5		
FORM PTO-14	149 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ABX-PHRI CON	APPLN. NO. 10/628,004		
MAR 0 8 2004	INFORMATION DISCLOSURE	APPLICANT Abraham Pinter et al.	CONFIRMATION NO. 3975		
Carrier to the		FILING DATE July 25, 2003	GROUP 1645		
MH	Trkola, A. et al., "CD4-Dependent, Antibody-Sensi CCR-5," Nature, 384:184-187 (1996)	itive Interactions Between F	HIV-1 and Its Co-receptor		
	Trkola, A. et al., "Human Monoclonal Antibody 2G12 Defines a Distinctive Neutralization Epitope of the gp120 Glycoprotein of Human Immunodeficiency Virus Type 1," J. Virol., 70:1100-1108 (1996)				
Tykola, A. et al., "Neutralization Sensitivity of Human Immunodeficiency Virus Type 1 Primary to Antibodies and CD4-Based Reagents Is Independent of Coreceptor Usage," <i>J. Virol.</i> , 72:18 (1998)					
Ugolini, S. et al., "Inhibition of Virus Attachment to CD4 ⁺ Target Cells Is a Major Mechanism Line-Adapted HIV-1 Neutralization," <i>J. Exp. Med.</i> , 186:1287-1298 (1997)			or Mechanism of T Cell		
	VanCott, T.C. et al., "Dissociation Rate of Antibody-gp120 Binding Interactions Is Predictive of V3-Mediated Neutralization of HIV-1," <i>J. Immunol.</i> , 153:449-459 (1994)				
	van Spriel, A.B., "Immunotherapeutic Perspective for Bispecific Antibodies," <i>Immunology Today</i> , 21:391-397 (2000).				
	Wu, D. et al., "Neuroprotection With Noninvasive t Sci., 96:254-259 (1999).	Neurotrophin Delivery to the	Brain," <i>Proc. Natl. Acad.</i>		
	Wu, L. et al., "CD4-Induced Interaction of Primary Receptor CCR-5," <i>Nature</i> , 384:179-183 (1996)	HIV-1 gp120 Glycoproteins	With the Chemokine		

Yang, G. et al., Neutralizing Antibodies Against HIV Determined by Amplification of Viral Long Terminal Repeat Sequences From Cells Infected in Vitro by Nonneutralized Virions," *Journal of*

Immunodeficiency Virus — Uninfected Recipients of Candidate AIDS Vaccines," J. Infec. Diseases.,

Zolla-Pazner, S. et al., "Immunotyping of Human Immunodeficiency Virus Type 1 (HIV): an Approach to Immunologic Classification of HIV," *J. Virol.*, 73:4042-4051 (1999)

Acquired Immune Deficiency Syndromes and Human Retrovirology, 17:27-34 (1998)

Zolla-Pazner, S. et al., "Neutralization of a Clade B Primary Isolate by Sera from Human

12/09/2006

175:764-774 (1997)